



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,697	04/04/2002	Takashi Mimura	1061-02	9428

35811 7590 04/01/2004

IP DEPARTMENT OF PIPER RUDNICK LLP
ONE LIBERTY PLACE, SUITE 4900
1650 MARKET ST
PHILADELPHIA, PA 19103

EXAMINER

VO, HAI

ART UNIT PAPER NUMBER

1771

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,697

Applicant(s)

MIMURA ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Claim Objections

1. Claims 1-3, and 5-12 are objected to because of the following informalities: claim 1, lines 6, the term "havign" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa et al (US 5,672,409) in view of Ishii et al (US 5,710,856).

Miyakawa teaches a reflector for surface light sources comprising a three-layer structure A/B/A wherein the B-layer is made of a polyester resin and contains fine voids (column 6, lines 35-40) while the A-layer, as a coating layer, comprises a mixture of acrylic resin, silica particles, isocyanate and fluorescent whitening agent (examples 2 and 5). Miyakawa discloses the white film having the degree of glossiness within the claimed range (table 1). Miyakawa teaches the white film is formed from a resin composition consisting essentially of polyester (column 3, lines 25-45). Miyakawa teaches that the voids are formed through melt extrusion of a mixture of a polyester resin, a polyolefin resin, and inorganic particles, followed by stretching the film in at least one direction (column 3, line 59 et seq.). Miyakawa teaches the white film is a laminate of two film layers A/B (column 6,

lines 35-42). The A-layer of Miyakawa corresponds to Applicants' coating layer. Miyakawa is silent as to the A-layer comprising a light stabilizer. Ishii discloses a light reflective sheet comprising a porous resin sheet and a protective layer laminated on at least one surface of the porous resin sheet (abstract). Ishii discloses that the protective layer contains a light stabilizer component such as benzophenone to improve light resistance to ultraviolet light (column 14, lines 45-48, column 8, line 61, and column 13, lines 5-20). It appears that Ishii and Miyakawa references are related to a light reflective sheet of a liquid crystal display. The A-layer of Miyakawa and the protective layer of Ishii are composed of a polyester resin and inorganic fine particles (Miyakawa, column 6, lines 35-42 vs. Ishii, column 13, lines 60-62). The reflective sheets of Miyakawa and Ishii have a mean reflectance at least 85%, measured on the protective layer exposed to light having a wavelength of from 400 to 700 nm within the claimed range (Miyakawa, table 1 vs. Ishii, table 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a light stabilizer into the A-layer of Miyakawa motivated to provide light resistance to ultraviolet light, which is important to the expectation of successfully practicing the invention of Miyakawa, thus suggesting the modification.

Miyakawa does not specifically disclose that the voids in the surface layer are smaller than the voids in the inner layer. However, Miyakawa teaches that the A-layer contains inorganic fine particles and the sheet of the laminated

Art Unit: 1771

polymers A/B/A is stretched in at least one direction (example 3). It appears that Miyakawa and Applicants are using inorganic particles having similar particle size and present in the same amounts in the A- and B-layers (Miyakawa, column 6, lines 40-42, 60-65 vs. Applicants' specification, pages 10 and 22). Further, Miyakawa is using the same approach to form the voids in the white film. The voids are created around the inorganic particles through stretching. It is the examiner's position that the relative void diameter in the A-layer and B-layer would be inherently present. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-3, 5, 6, and 8-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of

Art Unit: 1771

U.S. Patent No. 5,672,409 in view of Ishii et al (US 5,710,856) because of the reasons set forth in the paragraph no. 3. Additionally, claims 1-2 of U.S. Patent No. 5,672,409 do not specifically disclose the degree of glossiness of the white film. It appears that the laminate of Miyakawa as modified by Ishii meets all the structural limitations and chemistry as recited in the claims. The white film comprises a polyester resin and fine voids. The coating layer having an UV absorber is provided on at least one side of the white film. The laminate has a mean reflectance measured from coating layer within the claimed range. It is not seen that the laminate would have performed differently from that of the present invention with respect to the degree of glossiness. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties.

Response to Arguments

6. The 103 art rejections over Ishii in view of Miyakawa have been overcome by the present arguments (see pages 5 and 6 of Applicants' amendment filed on 01/22/04).
7. The 103 art rejections over Miyakawa in view of Ishii and the double patenting rejections have been maintained for the following reasons. Applicants argue that one of ordinary skill in the art would not be motivated to add an UV absorber as taught in the protective layer of Ishii in the A-layer of Miyakawa because of their

different chemistry compositions. The protective layer of Ishii has no inorganic particles while the A-layer of Miyakawa is fully loaded with inorganic particles. The arguments are not found persuasive because the protective layer of Ishii is fully loaded with inorganic particles as well (column 13, lines 60-67). Ishii discloses that an UV absorber is added in the protective layer to provide resistance to UV light (column 13, lines 10-12, column 14, lines 45-48). It is believed that the motivation to combine the two cited references is sufficient and strong. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a light stabilizer into the A-layer of Miyakawa motivated to provide light resistance to ultraviolet light, which is important to the expectation of successfully practicing the invention of Miyakawa, thus suggesting the modification. Accordingly, the art rejections and double patenting rejections are thus sustained.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Vo

HV